

## 부중대뇌동맥 기시부의 동맥류

- 증례 보고 -

안 정 용 · 주 진 양

= Abstract =

## Aneurysm at the Origin of the Accessory Middle Cerebral Artery

- A Case Report -

Jung Yong Ahn, M.D., Jin Yang Joo, M.D.

Department of Neurosurgery, Yonsei University College of Medicine, Seoul, Korea

A case of unruptured cerebral aneurysm at the junction of accessory middle cerebral artery and the distal portion of the A<sub>1</sub> segment of the anterior cerebral artery is reported. To the authors' knowledge, this is the first reported case of cerebral aneurysm developed at the junction of accessory middle cerebral artery, demonstrated on magnetic resonance angiography(MRA). The accessory middle cerebral artery is a rare vascular variant of middle cerebral artery. Furthermore, it is extremely rare for an aneurysm to be developed at the origin of the accessory middle cerebral artery. The development of the accessory middle cerebral artery is very important in surgery of cerebral aneurysm and collateral circulation of cerebral infarction. Review of the literature regarding the genesis and anatomical variation of the accessory middle cerebral artery is also presented.

**KEY WORDS :** Accessory middle cerebral artery · Aneurysm · Anterior cerebral artery · Variant of middle cerebral artery.

## 서 론

9 가

가

1962 Crompton<sup>2)</sup>

1

1

(accessory middle cerebral art -

ery)

, 1970 Handa<sup>4)</sup>

증 례

. 1973

Teal<sup>8)</sup>

: , , 44 .

:

: 7

, 5

. 1984 Manelfe

1)

0.3 4.0%

2)7)10)

260/180mmHg,

96/min,

24/min,

X-ray

BUN/Cr 24.8/1.9

가

가

(Fig. 1).

4 × 5mm

가

1

(Fig. 2).

(lacunar infarction)

(MRA)

가



Fig. 1. Magnetic resonance angiography demonstrating the left accessory middle cerebral artery(short arrow) arising from the distal part of the anterior cerebral artery with an aneurysm(long arrow) at its origin.



Fig. 2. Digital subtraction angiography showing an aneurysm projected to superior direction(long arrow) and the accessory middle cerebral artery arborizing basal perforating artery(arrowhead).

5 6mm

, 1973 Teal<sup>8)</sup>

4 × 5mm

(Fig. 3).

1 ,

2 ,

3

Manelfe<sup>1)</sup>

0.3 4.0%

2)7)10)

2

가

가

2)3)4)

가

1977 Waga<sup>9)</sup>

9

(Table 1)<sup>3)5)6)10)</sup>

1962 Crompton<sup>2)</sup>

1

가

가

가

가

가



**Fig. 3.** Intraoperative photograph showing a saccular aneurysm (small arrow) originating from the accessory middle cerebral artery (large arrow) and severe atherosclerotic change on the cerebral arteries.

**Table 1.** Summary of reports of the accessory middle cerebral artery with aneurysm at its origin

Case	Author, Year(Reference)	Associated aneurysm	Number	Anomaly demonstration
1	Waga, 1977(9)	Left Acc.MCA	1	Angiography,operation
2	Handa, 1982(3)	Right Acc.MCA	1	Angiography,operation
3	Miyazaki, 1984(5)	Left Acc.MCA	1	Angiography,operation
4	Yamamoto, 1992(10)	Acc.MCA	5	Angiography
5	Otawara, 1997(6)	Right Acc.MCA	1	Angiography,operation

Acc.MCA : Accessory middle cerebral artery

7).  
가

7).  
가 가  
Recurrent Artery of Heubner  
(RAH)  
.  
,  
RAH가  
4) Teal 8) ,  
가 , RAH가  
가 ,  
RAH가 가  
RAH  
. Takahashi 7)  
RAH 가 (tuberculum olfac -  
torium)  
RAH가  
.  
(budd -  
ing) 가 1).  
,  
, RAH  
.  
결 론  
1  
가  
.  
가

- : 1999 8 25
- : 2000 2 1
- :  
135 - 270 146 - 92  
: 02) 3497 - 3390, : 02) 3461 - 9229  
E - mail : jjyoo@yumc.yonsei.ac.kr

## References

- 1) Abanou A, Lasjaunias P, Manelfe C, Lopez-Ibor L : *The accessory middle cerebral artery (AMCA) : Diagnostic and therapeutic consequences. Anat Clin* 6 : 305-309, 1984
- 2) Crompton MR : *The pathology of ruptured middle-cerebral aneurysms with special reference to the differences between the sexes. Lancet* 2 : 421-425, 1962
- 3) Handa J, Matsuda M, Okamoto K, Kidooka M : *Association between accessory middle cerebral artery and cerebral aneurysm : Report of two cases. Acta Neurochir (Wien)* 64 : 151-157, 1982
- 4) Handa J, Shimizu Y, Matsuda M, Handa H : *The accessory middle cerebral artery : Report of further two cases. Clin Radiol* 21 : 415-416, 1970
- 5) Miyazaki S, Ito K, Ishii S : *Aneurysm at the origin of the accessory middle cerebral artery. Surg Neurol* 22 : 292-294, 1984
- 6) Otawara Y, Suzuki M, Abe M, Tomizuka N, Ogawa A : *Dissecting aneurysms of the anterior cerebral artery and accessory middle cerebral artery. case report : Neurosurg Rev* 20 : 145-148, 1997
- 7) Takahashi S, Hoshino F, Uemura K, Takahashi A, Sakamoto K : *Accessory middle cerebral artery : Is it a variant form of the recurrent artery of Heubner? AJNR* 10 : 563-568, 1989
- 8) Teal JS, Rumbaugh CL, Bergeron RT, Segall HD : *Anomalies of the middle cerebral artery : Accessory artery, duplication, and early bifurcation. AJR* 118 : 567-575, 1973
- 9) Waga S, Kojima T, Morooka Y, Sakakura M : *Aneurysm of the accessory middle cerebral artery. Surg Neurol* 8 : 359-360, 1977
- 10) Yamamoto H, Marubayashi T, Soejima T, Matsuoka S, Matsukado Y, Ushio Y : *Accessory middle cerebral artery and duplication of middle cerebral artery-terminology, incidence, vascular etiology, and developmental significance. Neurol Med Chir (Tokyo)* 32 : 262-267, 1992